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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,301	01/21/2004	Archer C.C. Chen	CHEN403	9891

1444 7590 06/22/2005

BROWDY AND NEIMARK, P.L.L.C.  
624 NINTH STREET, NW  
SUITE 300  
WASHINGTON, DC 20001-5303

EXAMINER

CHAMBERS, MICHAEL S

ART UNIT	PAPER NUMBER
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3711

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/760,301

Applicant(s)

CHEN, ARCHER C.C.

Examiner

Mike Chambers

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Taiwan on 12/17/2003. It is noted, however, that applicant has not filed a certified copy of the application as required by 35 U.S.C. 119(b). A copy of this application is requested by the examiner, even if the applicant does not claim priority.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya et al (4346217) in view of Galloway et al (6435982). Tsuchiya et al discloses the elements of claim 1 ( 2:18-20 ), however it fails to clearly disclose the use of a material having a HRC greater than 35. Galloway et al discloses the use of a material having a HRC greater than 35 (8:55-59, 11:20-50). The use of beta-titanium is old in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to have employed the material of Galloway et al with the apparatus of Tsuchiya et al in order to increase the potential market for the product and the durability of the product. Although not disclosed, the beta-titanium material has a HRC of 45.

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**the rockwell hardness chart:**

**Rockwell hardness testing measures the material's resistance to deformation, in this case indicating it's ability to project a golf ball. The higher the letter and number, the harder the material.**

material:	hardness:	material:	hardness:	material:	hardness:
Cast Aluminum	HRB 08	431 Stainless	HRC 22	15-5 Stainless	HRC 35
6061 Alloy	HRB 55	17-4 Stainless	HRC 31	Beta Titanium	HRC 45
304 Stainless	HRB 76	6AL-4V Titanium	HRC 33	Maraging Steel	HRC 50
Carbon Steel	HRB 87				

The specification provides no relevant information with regards to the claimed metallic material or surprising or unanticipated results that show the improvement it is therefore considered a design choice. It provides no relevant information with regards to the claimed non-metallic material or results that show the improvement. The application appears to merely be claiming the idea that a golf club crown with an HRC greater than 35 would be novel.

As to claims 2 and 3: See claim 1 rejection Tsuchiya et al discloses using a material with a density greater than 7 (3:11-18) The specification provides no unexpected or surprising results in using a crown thickness of 0.5 mm or 0.35mm. It would have been obvious to one of ordinary skill in the art to have selected any one of several equivalent crown thickness in based on cost and design considerations.

As to claim 10: Galloway et al discloses it is old to weld the faceplate (6:9-16). It would have been obvious to one of ordinary skill in the art at the time of the invention to have selected any one of several equivalent attachment methods based on cost and design considerations.

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Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya et al (4346217) in view of Galloway et al (6435982 ). as applied to claim 1 above, and further in view of Official Notice. Official notice is taken that it is well known to use various non-metallic material in the manufacture of golf clubs (See 5527034 7:18-22). The specification provides no unexpected or surprising results in using a non-metallic material. It would have been obvious to one of ordinary skill in the art to have selected any one of several equivalent materials based on cost and design considerations.

Claims 6 -9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya et al (4346217) in view of Galloway et al (6435982 ). as applied to claim 1 above, and further in view of Burrows (6475101). Burrows discloses brazing is well known in the art (2:39-41, 4:59-65). It would have been obvious to one of ordinary skill in the art to have selected any one of several equivalent attachment methods, including brazing based on cost and design considerations.

As to claim 7: Burrows discloses a crown that covers the body (fig 7).

As to claim 8: Burrows discloses a body with an annular recess and a crown mounted in the recess by brazing (fig 7). The attachment design and means for attachment are considered design choices. The specification provides no unanticipated or surprising results from using this configuration. It would have been obvious to one of ordinary skill in the art at the time of the invention to have selected any one of several equivalent attachment methods based on cost and design considerations.

As to claim 9 : See claim 6 rejection. Burrows discloses a faceplate and body molded into a single unit (fig 2)

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Chambers whose telephone number is 571-272-4407. The examiner can normally be reached on Mon-Fri 8:30-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 571-272-4415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6435982\*5346217\*6475101

Michael Chambers  
Examiner  
Art Unit 3711

June 20, 2005

  
GREGORY VIDOVICH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700